

Technical Meeting Notes
St. Lucie River Basin Management Action Plan (BMAP)

South Florida Water Management District, Martin Service Center
780 SE Indian Street, Stuart, FL

March 29, 2011
1:30 PM – 4:00 PM

Meeting Minutes:

After introductions around the room, Bonita Gorham (DEP) reviewed progress on the St Lucie BMAP process. She described the process used to define the boundary for the St Lucie BMAP, noting that it extends beyond the WBIDs on which the TMDLs were based. She then described how the basin was “carved up” to get detailed allocations by entity. She described the use of GIS information provided by each of our stakeholders, and how this information was used to develop the allocation map (on display and on slide). Ms. Gorham also asked all entities to review the (GIS) boundaries for their jurisdictions and contact her if there were any errors, or adjustments needed.

She explained the processing order in which acreages were “clipped” from the base map (of BMAP watershed), for acreage calculations, were as follows:

- (1) the Florida Power and Light cooling pond (about 6500+ acres) near Lake Okeechobee (does not discharge to the C-44 basin, *except under extreme circumstances*)
- (2) managed conservation, preservation lands, and parks of DEP, SFWMD, local
- (3) 298 or Water Control Districts
- (4) State roadways (District IV and Turnpike responsibilities)
- (5) County MS4s and Central Drainage Districts (CDDs)
- (6) Agricultural lands
- (7) all *remaining* lands were then “given” to the respective County jurisdictions [e.g., identified in detailed allocations as either (County), other versus (County) MS4].

Ms. Gorham mentioned that FDEP did a quick comparison between the 1999 FLUCCS coverage and the 2004 FLUCCS coverage, and noted limited changes. She said the decision to base detailed allocations on 1999 land use was to maintain consistency with information presented in the adopted St Lucie Estuary TMDL (2008). But that the model we will present today allows us flexibility- it can be easily applied, and readily duplicated - to make land use acreage adjustments possible, as more accurate land use coverage is available (*but that [FDEP] had to start somewhere*). A commenter (FDACS) also stated that it will be important to discern potential changes in agricultural lands under “active production” versus “fallow lands” and, similarly, another comment was made regarding citrus areas that were strongly impacted by citrus canker in the northern end of the basin. (Ms. Gorham acknowledged: “agreed”)

Ms Gorham addressed “Managed” conservation lands (MLs):

MLs were **not** given “allocations”, however, load estimates *are* shown. These are lands that were either acquired for the purposes of conservation (for larger public works projects, or CERP projects), or for water storage/reservation purposes (e.g., in C-23 and C-24), or, are preservation or park lands (natural lands from which allocations were not appropriate). Ms. Gorham indicated that additional investigations are still necessary to parse out those lands that are truly “preservation” lands (or restoration projects) versus “conservation” lands that are on a “holding” pattern, or State-acquired, recognizing that agricultural use is still the prevalent land use underlying some of those conservation lands, (i.e., “contributing loads” to the basin). She said some preliminary work has been done for this investigation (shown in model).

Ms. Gorham also wanted to address Central (or community) Drainage Districts (CDDs) allocations in the watershed, stating that: Four CDDs were given separate allocations because they met three criteria: *first and foremost* (#1) these entities do not discharge to the (municipality’s) MS4 system; and/or, (2) they receive at least 75% of stormwater utility fees to fund treatment or maintenance projects, and/or, (3)

they are developed (with infrastructure/homes built). Thus, using these three criteria, four out of the eleven named CDDs within the City of Port St. Lucie did receive separate allocations (to be discussed today).

Ms. Gorham also addressed Water Control District allocations. She said there are four WCD's identified in the draft allocations: North St. Lucie River WCD, Troup-Indiantown Drainage District, Hobe Drainage District, and the Pal Mar WCD. She acknowledged an earlier report that the Pal Mar District was outside of the St. Lucie watershed - since it flows and is more a part of the Loxahatchee River; Bonita said they will be removing Pal Mar from the BMAP basin boundaries and from allocations. She also mentioned that all land uses, whether urban or agricultural, in these WCDs (and their associated loads) were allocated to the WCDs. She said that FDEP is considering this a means of opening up "opportunities" for WCD projects outside of "waters of the State", by allowing other projects to move forward in the BMAP such as targeted "coordination" efforts (and outreach) with DACS/NRCS staff for the implementation of BMPs (through NOIs), and even perhaps in getting meaningful cost-share projects funded.

Ms. Gorham briefly discussed projects for which entities with allocations may receive credits. She noted that projects implemented from Year 2000-forward will be considered for BMAP "credit". Ms. Gorham encouraged all stakeholders to provide all activities/projects that they wished to be considered eligible, either structural or for provisional (non-structural/education & outreach) BMAP credit. She requested that these are due before the next scheduled meeting (in late May). She advised all entities to also include any projects *in the planning stages*, those in their capital improvement or long-range plans (& for FDOT, in EDTM process), or any projects for which funding has/or will be requested in the future (so that these projects can be included on the BMAP's "radar").

A question was asked about how the BMAP will account for federal CERP projects and the nutrient reductions they will achieve, if implemented? Bonita answered: These reductions will be included in the BMAP & that FDEP is working (and will continue to work) closely with the SFWMD to identify these projects (such as the C-44 project) as they are being funded and/or implemented, and then later, to quantify the project(s) expected reductions for "credit" in the BMAP. The commenter also encouraged SFWMD and DEP to use the BMAP to prompt federal funding of these proposed projects.

Ms. Gorham noted, due to the complexities of this basin and the significant reductions necessary by agricultural properties (and of each entity), that it may mean a need for an extended implementation timeframe in order that such significant reductions occur (& also in recognizing the economic downturn and budget shortfalls for all parties involved); She acknowledged FDEP's need for flexibility here and will be bringing forward those discussions at later technical meetings. She stated that FDEP will be working on an implementation schedule with stakeholders (but that stakeholders must still provide FDEP reasonable assurance, via projects "on the ground" or "planned", that demonstrates that all stakeholders continue to make progress along the way).

A commenter (Martin County) asked about the consistency of techniques in calculating expected reductions from projects? The commenter encouraged DEP to apply a consistent "ruler" for determining project's (success) across the basin. Ms. Gorham noted that FDEP recognizes the need for developing standard reduction calculation techniques, so that they *can* be applied consistently to projects, not only in this basin, but also Statewide. She emphasized that the current BMP efficiency table (used to calculate stakeholder reductions for this BMAP) was presented at the August 2010 meeting, and that the BMP efficiencies table currently used for BMAP credits (Statewide) can be viewed in the ftp folder (August) meeting notes. Ms. Gorham also relayed that FDEP is still awaiting information from UF (and FSA) relating to a BMP efficiency rate study in Florida (for structural BMPs) (*these results presumably due out any time now*), and that preliminary results looked promising. She stated that FDEP will make any adjustments needed to the BMP efficiency rates as any new information becomes available (street sweeping, etc.).

Ms. Gorham stated that, while the initial project collection sheets are needed from each of our stakeholders now, they can also expect that FDEP will request additional, more detailed project data (e.g.,

drainage area calcs, flow curve data, permit-related data, etc.) from our stakeholders at a later date, as these will be necessary to calculate expected reductions (& once a more detailed project collection sheet with needed inputs becomes available – stating that FDEP is working with our contractors on this now (& expected in Fall 2011).

Dr. Wayne Magley (DEP) presented slides providing background information on the development of the TMDLs for the St Lucie. A question was asked about whether additional TMDLs are being developed for the area and their relation to the St. Lucie BMAP. Dr. Magley said that three additional consent decree TMDLs are to be developed by 2012 – these include, Manatee Pocket (WBID 3208), South St. Lucie (WBID 3210B), and Ten-Mile Creek area (WBID 3194A). He indicated that we anticipate that nutrient reduction targets being set in the St Lucie BMAP, once achieved, will constitute compliance (or implementation) of these additional TMDLs, once developed. A commenter asked about the status of the Mercury TMDL. Wayne responded that the draft TMDL will be available by the end of the year and that the materials from the annual stakeholder meeting held in January are on the (TMDL) website.

Dr. Bob Kelly (SAIC) gave a presentation on the process for developing draft allocations for entities. He described two different techniques – a target load/acre method and a straight percentage reduction method for each of the six (SFWMD) sub-basins. Dr. Kelly said that FDEP prefers the target load/acre method because it places the emphasis on those areas that are developed and less on those that are undeveloped. The runoff coefficients (ROCs) and event mean concentrations (EMCs) were adjusted as appropriate from Harvey Harper's (2007) figures to be consistent with conditions in the St Lucie. These adjustments yielded loadings in the six sub-basins that were consistent with those in the St Lucie Watershed Protection Plan (SLRWPP); in all cases but one (Total Nitrogen in the South St. Lucie), and that the loadings in the DEP model matched those in the SLRWPP within 20%. Handouts provided to participants detailed loadings by sub-basin and the allocations to entities.

Boyd Gunsalas (SFWMD) asked if we used actual flow data (from the discharge gates) or if these were predicted flow rates from other models or information. Dr. Kelly stated that where we had actual flow data - we used it, but that there were some areas of the basin (e.g., in the northern tributaries: 5-10 mile creek area) where predicted flows were used for the model.

Representatives of the SFWMD also asked why the spreadsheet model of loads for the St. Lucie River Watershed Protection Plan (RWPP) was not used for the BMAP? Ms. Gorham and Dr. Kelly stated that very early on in the BMAP process we had met with SFWMD representatives in order to come toward some agreement with the methods in which we could proceed for BMAP allocation purposes. This "spreadsheet" model (used for the RWPP) was not brought up in those discussions; rather, much of the discussion was on whether or not the WaSH model, or some other "sophisticated" model could be useful to calculate detailed allocations for the TMDL/BMAP. We offered to follow up on this with SFWMD and obtain this "spreadsheet model" and will review whether or not it could be used as we moved forward in this BMAP process, and to align the models as much as we could (after-the-fact) - or vice versa.

Dr. Kelly discussed the significant contribution of nutrients from agricultural lands (over 50% of the loading), and reflected more fully on how such reductions would provide a much greater likelihood that needed reductions could be achieved in this basin. He stated that serious attention must be given to the implementation of BMPs on agricultural lands, which contribute by far the greatest proportion of nutrients. He also noted that many of the managed conservation lands were former agricultural lands. A commenter remarked that sometimes the management of conservation lands included practices that would contribute nutrient loadings (e.g., use of cattle grazing on conservation lands to control exotic plant species). Ms. Gorham stated that FDEP has been in contact with the SFWMD to obtain leased lands agreements/confines, which include the implementation of BMPs on those leased lands. (& she noted the overlay map on which leased cow/calf and other agricultural lands on WMD-owned properties have been identified in St. Lucie, and were still awaiting same information for those lands in Martin County (e.g. Allapatah Flats).

Ms. Gorham also stated that (such significant reductions) the BMAP will likely require that ALL entities explore more “out-of-the-box” ideas, such as joint regional projects in order to achieve meaningful reductions (& cost feasible projects). She indicated that larger joint public works-type projects may allow cities/counties/FDOT/State to explore use of “in-kind services” that would reduce the overall cost of implementation (e.g., via land donation, public works departments to contribute design/construction services, etc.).

A question was posed about the incorporation of future fecal coliform TMDLs into the St. Lucie BMAP. Dr. Magley responded that DEP is working on fecal coliform TMDLs and nutrient/DO TMDLs for the St. Lucie/Loxahatchee basin this year and expect to have Draft fecal coliform TMDLs in the St. Lucie basin before the end of 2011. This brought up a question by another commenter, whether or not stakeholders would have an opportunity to review those TMDLs? Dr. Magley said they would hold a public meeting on those prior to adoption, and that this process includes a formal comment period.

Another commenter asserted that the biggest input to the St Lucie Estuary is Lake Okeechobee and that it is not addressed in the allocations. Ms. Gorham reminded the group that we have to work within the regulatory framework to address nutrient reductions, in setting target reductions and policy directives. She said that we are currently under the assumption [for this BMAP process] that Lake O will have to meet its TMDL; and that it was otherwise a complex issue (to say the least), but that this group [of stakeholders] would not be responsible for those reductions.

A question arose about the practice of spreading biosolids. It was noted that no land-spreading is occurring in Martin County, but there are still permits for biosolid application in St. Lucie County. The commenter stated that It was likely that the land-spreading occurred in 1990’s, but that other agricultural practices still present a “legacy” load problem of nutrients to the watershed. Ms. Gorham stated that a new rules was recently adopted that would “phase out” biosolid application (in this basin) by 2012 or 2014? Another commenter noted that some biosolids spreading may be appropriate, but that the practice must be done properly to avoid nutrient runoff (e.g., correct application rates and timing). Ms. Gorham said this was something FDEP is aware of in this basin, and that we all need to stay on top of any new findings or permitted lands (& asking others to assist her if there are known problem areas).

Ms. Gorham concluded the meeting reviewing steps forward: (1) continuing to solicit input from entities on their projects and calculating anticipated nutrient reductions. (2) anticipate that the next meeting would be sometime in mid- to late-May and; (3) advocating that future meetings might facilitate discussions on larger regional (and individual) projects, through small group discussions, by sub-basin, to prompt the prioritization and planning of “worthy” projects to achieve target load reductions for this BMAP.

Materials to be Added to the FDEP ftp website (as soon as possible):

- Allocation tables presented in the meeting
- Spreadsheet model used to determine the allocations, and including acreage and other important calculations
- Meeting minutes
- Meeting presentation

<http://publicfiles.dep.state.fl.us/DEAR/BMAP/StLucie/>